

ANNUAL OPERATIONS AND PROGRESS REPORT

From Month/Year January 1984  
to Month/Year January 1985

(To be submitted for each mining operation at the end of each calendar year to the Division at this address:)

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
(801) 538-5340

OPERATOR: Chevron Resources Company MINE NAME: American Gilsonite Co.

ADDRESS: Bonanza Mine Site  
Bonanza, Utah 84008

PERMIT NUMBER AND DATE OF PERMIT: ACT/047/010

REPRESENTATIVE: \_\_\_\_\_

SECTION(S): Refer to attch. TOWNSHIP(S): \_\_\_\_\_ RANGE(S): \_\_\_\_\_

MINERAL(S) MINED: GILSONITE

STATE AND/OR FEDERAL MINERAL LEASE NUMBERS: SEE ATTACHMENTS

SPECIAL USE PERMITS AND/OR RIGHTS-OF-WAY: Refer to MRP

Section 40-8-15 and Rule M-8 of the Utah Mined Land Reclamation Act, requires each operator to include with this report an up-dated map and plan prepared in accordance with Rule M-3, as outlined in the requirements for annual report maps in Appendix I, providing a detailed status of all mining and reclamation activities which have occurred during the past year.

The report should include:

MINING:

(a) Tabulation of acreage disturbed (by pits, roads, facilities, etc.) during the report period with illustration on a current map.

<u>Disturbance</u>	<u>Acreage</u>
<del>Rxx</del> Mine Sites	<u>1</u>
Roads	<u>0</u>
Facilities	<u>0</u>
Waste Dumps	<u>0</u>
Other	<u>0</u>

(b) Tabulation of acreage affected to date (by years).

<u>Date by Year</u>	<u>Acreage (Total)</u>
1975	<u>                    </u>
1976	<u>                    </u>
1977	<u>                    </u>
1978	<u>                    </u>
1979	<u>                    </u>
1980	<u>                    </u>
1981	<u>                    </u>
1982	<u>                    </u>
1983	<u>SEE MINE PLAN</u>

(c) Tabulation of all topsoil (new) stockpile volumes (see chart below) and date of stockpiling.

# SOIL TABULATION CHART

Area Affected (in mining sequence) (If more space is needed, please attach.)	<u>Area</u>			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>etc.</u>
	<u>B-16 (For additional areas see Mine Plan)</u>			
Acreage of Area	<u>1</u>			
Depth of Topsoil Removal (inches)	<u>6"</u>			
Depth of Topsoil Replacement (inches)*	<u>                    </u>			
Estimate of Topsoil Volume Salvaged (yd <sup>3</sup> or ac ft)	<u>200 yd<sup>3</sup></u>			
Volume Actually Salvaged (yd <sup>3</sup> or ac ft)	<u>200 yd<sup>3</sup></u>			
Volume Required for Reclamation (yd <sup>3</sup> or ac ft)	<u>200 yd<sup>3</sup></u>			
Surplus or Deficit Volume (yd <sup>3</sup> or ac ft)	<u>0</u>			
Storage Status (short- or long-term)	<u>Short Term</u>			

Soil Tabulation Chart (continued)

Area Affected (in mining sequence)	Area			
	1	2	3	etc.
Storage Location	Site Edge			
Area Where Soil Has Been Used (if not stored)	N/A			
Running Total (all stockpiles) (yd <sup>3</sup> or ac ft)	See Mine Plan			
Short-term	200 yd <sup>3</sup>			
Long-term	NONE			

\*Of previously stripped area recently reclaimed.

(d) Tabulation of all (newly removed) out-of-pit spoil volumes, date of placement and illustration on a map.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
N/A		

(e) Tabulation of quantity of commodity mined.

	<u>Commodity</u>	<u>Tonnage</u>
(Mined)	GILSONITE	
(Milled)	GILSONITE	

(f) Description of any new construction during the report period with illustration on a map, including, but not limited to:

1. Buildings and support facilities.

N/A

2. Roads.

N/A

3. Diversion ditches, collector ditches, interceptor ditches, etc.

N/A

4. Culverts.

N/A

5. Sediment ponds, containment ponds.

N/A

6. Monitoring sites (vegetative, air quality, surface subsidence, surface water or ground water, etc.).

N/A

7. Topsoil stockpiles.

B-16

200 yd<sup>3</sup>

(g) Description of any environmental problem areas with a proposed plan for mitigation and illustration on a map, including, but not limited to:

1. Pit stability problems.

N/A

2. Subsidence.

N/A

3. Accidental water discharge, dam failure, etc.

N/A

4. Slumping, sliding or erosion.

N/A

5. Revegetation problem areas.

N/A

6. Existence and location of unsuitable (toxic) overburden.

N/A

RECLAMATION:

(a) Tabulation of the acreage reclaimed during the report period with illustration on a map, distinguishing between:

1. Backfilled, graded and contoured areas.

<u>Area</u>	<u>Acreage</u>
Ore Storage Pond	5.0
Rainbow vein closure	4.5 Not required by DOGM
PW-3 & 4	4.0
Exploration	4.0

2. Topsoiled areas.

<u>Area</u>	<u>Acreage</u>
Rainbow vein closure	4.5 Not required by DOGM

3. Seeded areas.

<u>Area</u>	<u>Acreage</u>
PW-3 & 4	4.0
Rainbow vein closure	4.5 Not required by DOGM
Ore Storage Pond	5.0
Exploration	4.0

4. Reseeded areas (areas previously seeded, then seeded again).

<u>Area</u>	<u>Acreage</u>
N/A	

(b) Tabulation of total acreage reclaimed (seeded with permanent seed mix) to date by years with illustration on an updated map:

<u>Year</u>	<u>Acreage</u>
1975	Ø
1976	Ø
1977	Ø
1978	Ø
1979	Ø
1980	Ø
1981	Ø
1982	Ø
1983	29
1984	17.5

(c) Description of the reclamation procedures used during the report period, including:

1. Average depth of topsoil applied.  
6 inches

---



---



---

2. Type of seed (species) used for seeding during the report period.  
See attached seed mix

---



---



---

3. Date of seeding during the report period.

Spring	Exploration - April 25, 27, May 4, 8	10 acres
	PW-3 & 4 - May 9-15	4 acres
Fall	Rainbow vein closure	4.5 acres
	Exploration	4 acres

4. Seeding procedures used.

(Hand broadcast or drilled or any other).

Laird Rangeland Seed Drill  
Hand Broadcast & Dragged

5. Rate of seed application.

Pounds Per Acre of Pure Live Seed (PLS) (if varied, please explain)

See attachment for minimum amounts applied

6. Type and rate of fertilizer applied.

Ammonium phosphate at 100 lb/acre

7. Type and rate of mulch applied.

Native hay blown on at 2000 lb/acre  
The Rainbow vein closure

8. Rate of irrigation water applied, if any. Please describe any type of sprinkling, or water applied (water truck, etc.).

N/A

9. Revegetation test plot information.

(Cover, density, productivity, etc.)

N/A





UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

SOIL, PLANT and WATER  
ANALYSIS LABORATORY  
UMC 48

Chevron Resources ATTN: D. Bassler  
Manila Star Route  
Vernal, UT 84078

*Ore Storage Pond Samples  
(Plant Area)*

September 27, 1984

Samples received on 9/4/84.

USU Log #	Ident.	pH	ECe *	Texture	Lime	ppm *		SAR *	meq/100g *		ppm NO <sub>3</sub> -N	% O.C.	SP *
						P	K		Na	Mg			
84-5196	2288401	8.1	0.7	Sandy Loam	++	2.1	49	10.1	2.48	1.88	12.7	1.12	34
84-5197	2298401*	8.2	0.6	Sandy Loam	++	3.5	37	16.7	4.59	1.17	1.6	3.15	17
84-5198	2298402*	8.6	0.6	Sandy Loam	++	5.0	45	15.9	5.34	1.16	8.1	2.40	34
84-5199	2298403	8.2	7.6	Sandy Loam	++	6.5	53	22.3	6.22	1.39	5.2	1.75	8

\* ECe = Electrical Conductivity of Saturation Extract measured in mmhos/cm

SAR = Sodium Adsorption Ratio

SP = % Water at Saturation

P and K (ppm) are NaHCO<sub>3</sub> extractable

Na & Mg (meq/100g) are Total extractable by NH<sub>4</sub>OAc



10. Soil analysis results.

See attached sheet

(d) Description of results of previous revegetation efforts, including:  
(This should be done as applicable.)

1. Types (species) of seed that have germinated and are growing.

N/A

2. Types (species) of seed that are not growing successfully.

N/A

3. Areas experiencing problems with weeds and weed types.

N/A

4. Significant erosional problems.

N/A

5. Areas of unsuitable overburden on the surface as related to  
revegetation failure.

N/A

6. Procedures used or proposed to correct these problems.

N/A



7. Acreage and dates of release (upon inspection by the State) of revegetated areas.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
N/A		

8. Results of soil analysis.

N/A

(e) Summarization of the reclamation costs incurred during the report period, including itemized costs for each operation (i.e., grading, topsoil replacement, seeding, etc.) and for each type of disturbance (i.e., spoil, haul roads, facilities removal, etc.) on a per acre basis.

	<u>Acres</u>	<u>Cost/Acre</u>
1. Grading		
2. Backfilling		
3. Contouring	17.5	
4. Topsoil Replacement	4.5	
5. Seeding	17.5	
A. Seedbed Preparation		
B. Mulch	5.0	\$180
C. Fertilizer	13.5	\$ 45
D. Seed	17.5	\$150
6. Other		

BOND INFORMATION:

- A. An updated bond estimate should be included, if required in the Division's approval of the Mining and Reclamation Plan (MRP) or if changes to the MRP have occurred, including a detailed itemization of actual/estimated reclamation costs as outlined in the RECLAMATION section above. The date of the release of revegetated areas from further responsibility for a partial bond release, if applicable, should also be included.

	<u>Amount</u>	<u>Type</u>	<u>Date Posted</u>
Present Bond			



Increased disturbance, if any:

Increased Bond Amount (attached reclamation estimate).

B. Bond release.

<u>Acres</u>	<u>Bond Amount Released</u>	<u>Date</u>
N/A		

ADDITIONAL INFORMATION:

Supply any additional information as requested by the Division related to:

- (a) Permit stipulations (status).  
(b) Other special conditions (status).



APPENDIX I

ANNUAL REPORT MAPS

1. Maps must be clear and legible contour maps or recent aerial photos. The scale should be 1 inch = 500 feet to adequately show topographic features.
2. Map sheets should be of a reasonable size, not to exceed 48 inches on a side.
3. Maps must have a title block with:
  - A. Map title.
  - B. Name and address of permittee.
  - C. Permit and amendment numbers.
  - D. Annual report period.
  - E. Scale, north arrow, contour interval, date of photography, etc.
4. All maps must show:
  - A. Legal subdivisions.
  - B. Permit area boundary clearly shown and labelled.
  - C. Amendment areas clearly shown and labelled.
  - D. Contour features.
5. The following features should all be clearly identified:
  - A. Topsoil stockpiles (numbered and with volumes).
  - B. Settling ponds and sediment control structures.
  - C. Haul roads.
  - D. Pits identified by location, name, number, etc.
  - E. Ramps (numbered).
  - F. Out-of-pit spoil dumps.
  - G. All waste disposal sites including, but not limited to:
    1. Landfill sites.
    2. Carbonaceous waste dumps.
  - H. Diversion ditches.
  - I. Monitoring sites.
6. All areas to be affected by mining and reclamation in the coming year should be outlined and labelled.

STATE AND/OR FEDERAL MINED LEASE NUMBERS

B-44	Federal Lease	U-0126940
WH-12	Federal Lease	U-073071
LE-5	Federal Lease	U-0126938
LE-6	Federal Lease	U-0126938

LOCATION OF OPERATION:    Lands are held within Uintah and Dushesne  
                                 Counties in Utah within the following  
                                 Sections

T 8 S   R 17 E   Section 32  
T 9 S   R 17 E   Sections 5, 4  
T 2 S   R   2 E   Sections 18, 19, 20  
T 8 S   R 24 E   Section 32  
T 9 S   R 23 E   Sections 1, 10, 12, 15, 25  
T 9 S   R 24 E   Sections 1, 2, 3, 7, 12, 15, 16, 17, 22, 23, 24, 25,  
                                 26, 27, 28, 29, 30, 32, 33, 34, 35, 36  
T 9 S   R 25 E   Sections 7, 8, 15, 16, 17, 21, 22, 23, 29, 30, 31, 32,  
                                 33  
T 10 S R 22 E   Section 24  
T 10 S R 23 E   Sections 28, 30, 32, 34  
T 10 S R 24 E   Sections 1, 2, 3  
T 10 S R 25 E   Section 6  
T 11 S R 23 E   Sections 1, 2, 12  
T 11 S R 24 E   Sections 4, 5, 6, 7, 8, 9, 14, 15, 16, 17, 20, 22, 23,  
                                 24, 25, 26, 30, 32  
T 11 S   § 25 E   Sections 30, 21, 30, 32  
T 12 S R 24 E   Section 4  
T 12 S R 25 E   Sections 4, 5, 9, 10, 11, 12, 13, 14, 15, 24

SEED MIX BEING USED ON STUDY AREA AND MINE SITES

FALL 1983

COMMON NAME	BOTONICAL NAME	RATE/ACRE PLS	
		DRILLED	BROADCAST
Western Wheatgrass	<u>Agropyron smithii</u>	3.0	4.5
Bluebunch Wheatgrass	<u>Agropyron spicatum</u>	1.0	1.5
Russian Wildrye	<u>Elymus junceus</u>	2.0	3.0
Indianricegrass	<u>Oryzopsis hymenoides</u>	2.0	3.0
Yellow Sweet Clover	<u>Melilotus officinalis</u>	0.5	0.75
Nomad Alfalfa	<u>Medicago sativa</u>	0.5	0.75
Cicer Milkvetch	<u>Astragalus cicer</u>	1.0	1.5
Winterfat	<u>Ceratoides lanata</u>	1.0	1.5
Sagebrush	<u>Ademsia tridentata</u>	0.5	0.75
Rabbitbrush	<u>Chrysothamnus nauseosus</u>	0.5	0.75
		12.0	18.0





**American Gilsonite Company**

A Chevron Company  
Bonanza, UT 84008 • Phone (801) 789-1921

Bonanza Mining Operations

*File ACT/047/010*

RECEIVED

APR 29 1985

DIVISION OF OIL  
GAS & MINING

April 25, 1985

Mrs. Pam Grughbaugh-Lettig  
Utah Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203

Dear Mrs. Lettig:

Enclosed you will find the annual Operations and Progress Report for American Gilsonite Company, Bonanza Operations, for 1985. The report includes reclamation of the Rainbow vein closure, which involves 4.5 acres of pre-Act mined land. This reclamation was a voluntary procedure conducted by Chevron.

Should you have any questions, please contact me at 789-7795.

Sincerely,

O. L. Fyock  
Environmental Coordinator

OLF:vjw

Attach.

cc: RFD w/out attachments